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HRI IMAGING OF COOLING FLOWS

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Final Report

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Principal Investigator
Dr. Andrea H. Prestwich

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Smithsonian Institution

Astrophysical Observatory

Cambridge, Massachusetts 02138

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The NASA Technical Officer for this grant is Dr. Robert Petre, Code 666, Laboratory for High Energy Astrophysics, Space Science Directorate, Goddard Space Flight Center, Greenbelt, Maryland 20771.

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<u>Maryland 2011.</u>

ROSAT HRI Images of three galaxy clusters (Abell 85, Abell 496, and Abell 644) have been received. Deconvolution of the central 100 arcseconds of Abell 85 and Abell 496 shows some evidence for lumpy and emission, and a detailed statistical analysis of these clumps shows that three are significant at the 3-4 sigma level. Optical and infrared images of the central galaxies of these clusters have been obtained, and the data reduced. There is no evidence for optical counterparts to the X-ray clumps. These results are being prepared for publication in the Astrphysical Journal.